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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/606,057	06/28/2000	Gerard Chauvel	TIF-15767A.1	8397

7590 12/20/2001
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EXAMINER

TRAN, DENISE

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 12/20/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/606,057

Applicant(s)

GHAUVEL ET AL. 

Examiner

Denise Tran

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 07/907,191.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

2. Claims 6-13 are presented for examination.

3. The disclosure is objected to because of the following informalities: the status information of the parent applications should be updated.

Appropriate correction is required.

4. The following guidelines illustrate the preferred layout and content for patent applications. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

The following order or arrangement is preferred in framing the specification and, except for the reference to "Microfiche Appendix" and the drawings, each of the lettered items should appear in upper case, without underlining or bold type, as section headings. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) Title of the Invention.
- (b) Cross-References to Related Applications.
- (c) Statement Regarding Federally Sponsored Research or Development.
- (d) Reference to a "Microfiche Appendix" (see 37 CFR 1.96).
- (e) Background of the Invention.
 - 1. Field of the Invention.
 - 2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) Brief Summary of the Invention.
- (g) Brief Description of the Several Views of the Drawing(s).
- (h) Detailed Description of the Invention.
- (i) Claim or Claims (commencing on a separate sheet).

- (j) Abstract of the Disclosure (commencing on a separate sheet).
 - (k) Drawings.
 - (l) Sequence Listing (see 37 CFR 1.821-1.825).
5. There are no section headings for
- (e) Background of the Invention.
 - 1. Field of the Invention.
 - 2. Description of the Related Art including information disclosed under 37 CFR 1.97 and 1.98.
 - (f) Brief Summary of the Invention.
 - (g) Brief Description of the Several Views of the Drawing(s).
 - (h) Detailed Description of the Invention.
6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:
- A person shall be entitled to a patent unless –
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
7. Claims 6-8, 10 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Barnes et al. U.S. Patent No. 4829554 (hereinafter Barnes).

As per claim 6, Barnes teaches the invention as claimed, a cellular radio (e.g., abstract, line 1 and et seq.), comprising: a first processor (e.g., fig. 5, processor 134 or 136; or fig. 16, microprocessor 550 or 558, or audio processor; or fig. 24, microcomputer 320 or 350); a second processor coupled to the first processor (e.g., fig. 5, processor 134 or 136; or fig. 16, microprocessor 550 or 558, or audio processor; or fig. 24, microcomputer 320 or 350); a third processor coupled to the first processor (e.g.,

fig. 5, processor 134 or 136; or fig. 16, microprocessor 550 or 558, or audio processor; or fig. 24, microcomputer 320 or 350).

As per claims 7-8, 10 and 13, Barnes teaches wherein the first processor is the main processor of the cellular radio (e.g., fig. 5, main processor 134 or 136 of a central control station; or fig. 16, microprocessors 550 or 558, col. 32, line 56 and et seq.; or fig. 24, microcomputer 320 or 350); wherein the first processor performing management and vocoder signal processing (e.g., col. 33, line 42 and et seq.); wherein the second processor is a dedicated processor adapted to bit processing (e.g., fig. 5, processor 134 or 136; or fig. 16, microprocessor 550 or 558, or audio processor; or fig. 24, microcomputer 320 or 350; col. 36, line 4 and et seq.); and wherein three processors operate in parallel (e.g., col. 4, line 45 and et seq.).

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 6-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paneth et al., U.S. Patent No. 6,282, 180 B1, (hereinafter Paneth), and further in view of Barnes et al., U.S. Patent No. 4,829, 554, (hereinafter Barnes).

As per claim 6, Paneth teaches the invention substantially as claimed, a radio, comprising: a first processor (e.g., fig.2, el. 24 or 17 or 18 or 20 or fig.3, el 27 or el. 28

or 29 or fig. 25, el. 154); a second processor coupled to the first processor (e.g., fig.2, el. 24 or 17 or 18 or 20 or fig.3, el. 27 or el. 28 or 29 or fig. 25, el. 154); a third processor coupled to the first processor (e.g., fig.2, el. 24 or 17 or 18 or 20 or fig.3, el. 27 or el. 28 or 29 or 33 or 30a; fig. 25, el.154). Paneth does not explicitly show the use of cellular. Barnes, e.g., abstract, lines 1-4, is shown as an example that a cellular radio being well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a cellular radio to the system of Paneth because it would allow distribution of many of the control functions to cell stations associated with cells; thereby, monitoring and voice communication functions provides both security from interrupted service and significant reduced costs.

As per claims 7-11, and 13, Paneth teaches wherein the first processor is the main processor of the cellular radio (e.g., fig.2, el. 24 or 18 or 20 or fig.3, el. 27 or el. 28 or 29; and col. 8, line 54 and et seq.); wherein said first processor performs management and vocoder signal processing (e.g., fig.2, el. 24 or 17 or 20 or fig.3, el. 28 or 29 ; col. 7, line 63 and et seq. or col. 41, line 31); wherein said second processor performs protocol processing (e.g., fig.2, el.18 or fig.3, el. 29; and col. 8, lines 22-24); wherein the second processor is a dedicated processor adapted to bit processing (e.g., fig.2, el. 24 or 16 or 18 or 20 or fig.3, el. 27 or 28 or 29 or fig. 25, el. 154; col. 17, line 40 and et seq.); wherein the third processor performs signal processing on vectors processing (e.g., fig.3, el. 33 or 30a or fig. 25, el. 154; col. 71, line 64 and et seq.); and wherein three processors operate in parallel (e.g., abstract, line 1 and et seq.) .

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Paneth et al., U.S. Patent No. 6,282, 180 B1, (hereinafter Paneth), in view of Barnes et al., U.S. Patent No. 4,829, 554, (hereinafter Barnes), and further in view of Mano, Computer System Architecture, Prentice-Hall Inc., pages 282-284, 1982 (hereinafter Mano).

As per claim 12, Paneth does not explicitly show the use of an array processor. Mano as an example shows that both the concept and advantages of having a processor being an array processor are well known and expected in the art (page 282). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Mano with the combined system of Paneth and Barnes because it would provide for parallel computations on large arrays, thereby increasing system computation power.

11. Claims 6-8, 10-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claesson et al., A Multi-DSP Implementation of a Broad-band Adaptive Beamformer for Use in a Hands-free Mobile radio Telephone, pages 194-200, 02/1991, (hereinafter Claesson), and further in view of Barnes et al., U.S. Patent No. 4,829, 554, (hereinafter Barnes).

As per claim 6, Claesson teaches the invention substantially as claimed, a radio communication, comprising: a first processor (e.g., page 195, line 7 and et seq.); a second processor coupled to the first processor (e.g., page 195, line 7 and et seq.); a

third processor coupled to the first processor (e.g., page 195, line 7 and et seq.).

Claesson does not explicitly show the use of cellular. Barnes, e.g., abstract, lines 1-4, is shown as an example that a cellular radio being well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a cellular radio to the system of Claesson because it would allow distribution of many of the control functions to cell stations associated with cells; thereby, monitoring and voice communication functions provides both security from interrupted service and significant reduced costs.

As per claims 7, 10-11, and 13, Claesson teaches wherein the first processor is the main processor (e.g., page 195, line 27 and et seq.); wherein the second processor is a dedicated processor adapted to bit processing inherently (e.g., page 195, line 12, a processor executing an instruction or code in binary form or bits); wherein the third processor performs signal processing on vectors (e.g., page 198, col. 1, line 35 and et seq.); and wherein three processors operate in parallel (e.g., page 196, col. 2, line 31 and et seq.).

As per claim 8, Claesson does not specifically show the use of the first processor performing management and vocoder signal processing. Barnes teaches wherein the first processor performing management and vocoder signal processing (e.g., col. 33, line 42 and et seq.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a processor performing management and vocoder signal processing to the system of Claesson because it would allow distribution of many of the control functions to cell stations associated with cells; thereby, monitoring and

Art Unit: 2186

voice communication functions provides both security from interrupted service and significant reduced costs.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Claesson et al., A Multi-DSP Implementation of a Broad-band Adaptive Beamformer for Use in a Hands-free Mobile radio Telephone, pages 194-200, 02/1991, (hereinafter Claesson), in view of Barnes et al., U.S. Patent No. 4,829, 554, (hereinafter Barnes), and further in view of Mano, Computer System Architecture, Prentice-Hall Inc., pages 282-284, 1982 (hereinafter Mano).

As per claim 12, Claesson does not explicitly show the use of an array processor. Mano as an example shows that both the concept and advantages of having a processor being an array processor are well known and expected in the art (page 282). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Mano with the combined system of Claesson and Barnes because it would provide for parallel computations on large arrays, thereby increasing system computation power.

13. Applicant's arguments filed 9/25/01 have been fully considered but they are not persuasive.

Art Unit: 2186

14. In the remark, the applicants argued that it would not have been obvious for one of ordinary skill in the art at the time the invention made to have the DSP900 which is a multiprocessor computer in Lab environments having a plurality of cards to instead be a cellular radio without the improper hindsight.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Barnes, e.g., abstract, lines 1-4, is shown as an example that a cellular radio being well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a cellular radio to the system of Claesson because it would

Art Unit: 2186

allow distribution of many of the control functions to cell stations associated with cells; thereby, monitoring and voice communication functions provides both security from interrupted service and significant reduced costs (Barnes, col. 1, line 12 and line 53 and et seq.).

15. In the remarks, the applicants argued that no motivation to combine and the prior art must suggest the desirability of the modification.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Mano as an example shows that both the concept and advantages of having a processor being an array processor are well known and expected in the art (page 282). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Mano with the combined system of Claesson and Barnes because it would provide for parallel computations on large arrays, thereby increasing system computation power (e.g. Mano, page 282).

16. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Denise Tran whose telephone number is (703) 305-9823.

The Examiner can normally be reached on Monday and Thursday from 8.30 a.m. to 6.00 p.m.


If attempts to reach the examiner by telephone are unsuccessful the examiner's supervisor Matt Kim can be reached on (703)305-3821. The fax phone number for this group is (703)305-9731.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

DT

Denise Tran

12/13/01


MATTHEW KIM
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